

RE-Written Claims:

23. A method for detecting HIV antibodies employing a dry chemistry test strip to measure the HIV antibodies concentration in a urine or blood without the use of ELISA and HPLC methods for analysis of HIV antibodies, wherein the said method comprises the steps of preparing a test means by successively impregnating an absorbent carrier matrix with reagent solutions consisting essentially of ;

- c) buffer and enzyme conjugated to HIV antigen; and
- d) indicator substrate complex,

drying said test means, dipping completed test means into test sample, and determining the quantity of HIV antibodies present in said test sample by comparing the relative intensity of the color produced by the reaction of HIV antibody to the test means and comparing the color produced to a color chart with color blocks referenced to specific concentrations of HIV antibodies.

24. The method according to claim 23 wherein the said enzyme is selected from the group consisting of Galactosidase, Cellobiosidase, Arabinosidase, Fucosidase, Galactosaminidase, Glucosaminidase, Glucosidase, Glucuronidase, Lactosidase, Maltosidase, Mannosidase, or Xylosidase.

25. The method according to claim 23 wherein the said indicator substrate complex is selected from the group consisting of 5-bromo-6-chloro-3-indoxyl-beta-D-galactopyranoside, 4-Aminophenyl-beta-D-galactopyranoside, 3-indoxyl-beta-D-galactopyranoside, 5-Bromo-4-chloro-3-indoxyl-beta-D-galactopyranoside, 5-Bromo-3-indoxyl-beta-D-galactopyranoside, 6-chloro-3-indoxyl-beta-D-galactopyranoside, 6-Fluoro-3-indoxyl-beta-D-galactopyranoside, 8-Hydroxyquinoline-beta-D-galactopyranoside, 5-Iodo-3-indoxyl-beta-D-galactopyranoside, N-Methylindoxyl-beta-D-galactopyranoside, 2-Nitrophenyl-beta-D-galactopyranoside, 4-Nitrophenyl-beta-D-galactopyranoside, Naphthol AS-BI-beta-D-galactopyranoside, and 2-Naphthyl-beta-D-galactopyranoside or 4-Methylumbelliferyl-beta-D-glucuronic acid.

26. The method according to claim 23 wherein said buffer is selected from the group consisting of citrate, hepes, tris (trizma), taps, popso, tes, mops, tricine, mops, mes, bicine, bes, caps, epps, dipso, ches, capso, ampso, aces, ada, bis-tris-propane, tapso, heppso, tea, amp, phosphate, phthalate, succinate, hydrochloric acid, sulfuric acid, nitric acid, acetic acid, sodium hydroxide, or potassium hydroxide.

27. A method for detecting HIV antibodies employing a dry chemistry test strip to measure the HIV antibodies concentration in a urine or blood without the use of ELISA and HPLC methods for analysis of HIV antibodies, wherein the said method comprises the steps of preparing a test means by successively impregnating an absorbent carrier matrix with reagent solutions consisting essentially of ;

- c) buffer, horseradish peroxidase conjugated to HIV antigen; and
- d) buffer, tetramethylbenzidine, and urea peroxide,

drying said test means, dipping completed test means into test sample, and determining the quantity of HIV antibodies present in said test sample by comparing the relative intensity of the color produced by the reaction of HIV antibody to the test means and comparing the color produced to a color chart with color blocks referenced to specific concentrations of HIV antibodies.

28. The method according to claim 27 wherein said tetramethylbenzidine can be substituted with one of the following selected from the group consisting of 2,2'-Azino-di-(3-ethylbenzthiazolinesulfonic acid) diammonium salt, 3-Amino-9-ethyl carbazole, 2-5, dimethyl-2,5-dihydroperoxyhexane, Bis{4-[N-(3'-sulfo-n-propyl)-N-n-ethyl]amino-2,6-dimethylphenyl}methane, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3-methoxyaniline, N-Ethyl-N-(3-sulfopropyl)-3-methoxyaniline, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)aniline, N-Ethyl-N-(3-sulfopropyl)-3,5-dimethylaniline, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3-methylaniline, N-Ethyl-N-(3-sulfopropyl)-3-methylaniline, N-(3-sulfopropyl)aniline, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3,5-dimethoxy-aniline, N-Ethyl-N-(3-sulfopropyl)-3,5-dimethoxyaniline, N-Ethyl-N-(3-sulfopropyl)aniline, N-(2-hydroxy-3-sulfopropyl)-

3,5-dimethoxyaniline, N-(3-sulfopropyl)-3,5-dimethoxyaniline, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3,5-dimethylaniline, N,N-Bis(4-sulfobutyl)-3,5-dimethylaniline, pyrogallol, 4-aminoantipyrine, 2,4-Dichlorophenol, N,N-Diethyl-m-toluidine, p-Hydroxybenzene Sulfonate, N,N-Dimethylaniline, 3,5-Dichloro-2-Hydroxybenzenesulfonate, Sodium N-Ethyl-N-(3-Sulfopropyl)-m-Anisidine, N-Ethyl-N-(2-hydroxy-3-Sulfopropyl)-m-toluidine 3-Methyl-2-benzothiazolinonehydrazone or Dimerhyylaniline.

29. The method according to claim 27 wherein said buffer is selected from the group consisting of citrate, hepes, tris (trizma), taps, popso, tes, mopso, tricine, mops, mes, bicine, bes, caps, epps, dipso, ches, capso, ampdo, aces, ada, bis-tris-propane, tapso, heppso, tea, amp, phosphate, phthalate, succinate, hydrochloric acid, sulfuric acid, nitric acid, acetic acid, sodium hydroxide, or potassium hydroxide.